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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
10/646,417	08/22/2003	Lie-zhong Gong	3044.PKG	9143	
7590 08/02/2005 Cynthia L. Foulke NATIONAL STARCH AND CHEMICAL COMPANY			EXAMINER		
			SZEKELY, PETER A		
10 Finderne Avenue			ART UNIT	PAPER NUMBER	
Bridgewater, NJ 08807-0500			1714	·-	
				DATE MAILED: 08/02/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/646,417	GONG ET AL.				
Office Action Summary	Examiner	Art Unit				
	Peter Szekely	1714				
The MAILING DATE of this communication app	1	•				
Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1)⊠ Responsive to communication(s) filed on <u>22 August 2003</u> .						
	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4)⊠ Claim(s) <u>1-18</u> is/are pending in the application.						
4a) Of the above claim(s) 13-18 is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-12</u> is/are rejected.						
7) Claim(s) is/are objected to.						
<u> </u>	8) Claim(s) are subject to restriction and/or election requirement.					
Application Papers						
9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) All b) Some * c) None of:						
1. ☐ Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3.☐ Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date						
3) 🔲 Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 5) 🔲 Notice of Informal Patent Application (PTO-152)						
Paper No(s)/Mail Date <u>8/30/04</u> .	6) Other:					

U.S. Patent and Trademark Office PTOL-326 (Rev. 1-04) Application/Control Number: 10/646,417

Art Unit: 1714

DETAILED ACTION

Page 2

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-12, drawn to an adhesive, classified in class 524, subclass 487.
- II. Claims 13, 14 16 and 17, drawn to an article, classified in class 206, subclass 813.
- III. Claims 15 and 18, drawn to a method, classified in class 156, subclass 327.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful as an extruded film and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Application/Control Number: 10/646,417 Page 3

Art Unit: 1714

3. Inventions I and III are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the process as claimed can be practices with an adhesive containing a block copolymer.

- 4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
- 5. During a telephone conversation with Cynthia Foulke on 7/26/05 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-12. Affirmation of this election must be made by applicant in replying to this Office action. Claims 13-18 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

DETAILED ACTION

Claim Rejections - 35 USC § 112

- 6. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.
- 7. Claims 2, 3 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Application/Control Number: 10/646,417 Page 4

Art Unit: 1714

8. The terms "high heat stress properties and high temperature adhesion properties " in claim 2 are relative terms, which render the claim indefinite. The terms "high heat stress properties and high temperature adhesion properties" are not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The temperature has to be defined numerically. The claimed properties have to be defined precisely.

- 9. The term "good cold temperature tolerance" in claim 3 is a relative term, which renders the claim indefinite. The term "good cold temperature tolerance" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. How good is good?
- 10. In claim 10, line 3 is repeated.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 12. Claims 1-12 are rejected under 35 U.S.C. 102(b) as being anticipate by Atofina FR 2,819,821.
- 13. The examiner who does not speak or read French accepts the conclusions of the International Search Report without any reservations. Applicants' claims are not novel.

Application/Control Number: 10/646,417

Art Unit: 1714

14. Claims 1-4, 6-9, 11 and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Radigon et al. 2004/0122143 or Good et al. 2005/0003197.

Page 5

15. Radigon et al. disclose a hot melt adhesive comprising ethylene 2-ethylhexyl acrylate tackifiers and waxes in claims 1-6. For other ethylene alkyl acrylates see paragraphs 0059-0065 and Tables 1-7, for tackifiers and concentrations see paragraphs 0068-0072 for waxes and their concentrations see paragraphs 0073-0076. Good et al teach hot melt adhesives in the Abstract, ethylene 2-ethylhexyl acrylate, ethylene n-butyl acrylate and their blends in paragraph 0037, tackifiers and their concentrations in paragraphs 0042-0046 and waxes and their concentrations in paragraphs 0047-0050. Applicants' claims are not novel.

Claim Rejections - 35 USC § 103

- 16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 17. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

Art Unit: 1714

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

- 18. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atofina FR 28198212, in view of Radigon et al 2004/0122143 or Good et al. 2005/003197, further in view of Yalvac et al. 6,552,110.
- The primary and secondary references have been discussed already. Radigon 19. et al. additionally show hot melt adhesives having desirable properties based on both ethylene 2-ethylhexya acrylate and ethylene butyl acrylate copolymers, making the blend of said copolymers in hot melt adhesives obvious because it is a matter of obviousness for one of ordinary skill in the art to combine two or more materials when each is taught by the prior art to be useful for the same purpose. See In re Kerkhoven 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980). Yalvac et al. recite a thermoplastic marking composition in claim 1, which is a hot melt adhesive (column 7, line 50), tackifiers also in claim 1, functionalized polyethylene and waxes in claim 13 and functionalized polyethylene concentrations in claim 14. The functionalized polyethylene is used in addition to the wax component or as a replacement for the wax component (from column 9, line 35 through column 10, line 32). For waxes see from column 8, line 63 through column 9, line 34, for tackifiers, see column 7, line 48 through column 8, line 23. Accordingly, it would have been obvious to one having ordinary skill in the art; at the time the invention was made, to add the functionalized polyethylene of Yalvac et al. to the compositions of the primary and secondary references, in order to lower the viscosity and improve the heat resistance, the creep resistance and the shear

adhesion failure temperature.

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Szekely whose telephone number is (571) 272-1124. The examiner can normally be reached on 7:00 a.m.-5:30 p.m. Tuesday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

> Peter Szekelv Primary Examiner Art Unit 1714

Page 7

P.S. 7/26/05 Application/Control Number: 10/646,417

Art Unit: 1714

Page 8